SHALLOW CLAY RANGE SITE

1. TOPOGRAPHY

   a. This site occurs on undulating to very steep uplands. Slopes are commonly from 1 to 35 percent.

2. SOILS

   a. These soils are shallow clays, 20 inches or less, underlain by unweathered shales. Permeability is slow or very slow. Available water capacity is very low.

   b. Soil taxonomic units common to this site are:

      Dilts clay and silty clay
      Lisam clay and silty clay

      Refer to Section II-A for a complete list of soil taxonomic units and range sites.

3. POTENTIAL VEGETATION

   a. This site has a dominance of rhizomatous wheatgrasses with a mixture of other short and mid grasses. Principal species are western wheatgrass, green needlegrass, Sandberg bluegrass, and plains muhly. Other species are blue grama, thickspike wheatgrass, inland saltgrass, needleleaf sedge, and other upland sedges. Forb species make up about 10 percent of the total herbage production. Common woody plants are fringed sagebrush, big sagebrush, and Nuttall saltbush. Woody plants also make up about 10 percent weight of the total herbage.

   b. Continued heavy grazing by cattle results in a decrease of western wheatgrass, green needlegrass, plains muhly, and prairie junegrass. Species that increase under these conditions are blue grama, Sandberg bluegrass, inland saltgrass, needleleaf sedge, and other upland sedges. Further deterioration of the site results in a dominance of shortgrasses, fringed sagebrush, upland sedges, and undesirable forbs and shrubs.

   c. Approximate total annual production of this site in excellent condition is from 800 to 1200 pounds of air-dry herbage per acre, depending on growing conditions. Percent of the ground that is covered by living or dead vegetation is about 50 percent.

d. A detailed description of the vegetation in excellent condition is as follows:

Relative Percent Composition of the Potential Vegetation

	Mean Productivity	
	lbs/acre	% composition
Grasses		
Western wheatgrass	500	50
Green needlegrass	50	5
Blue grama	50	5
Plains muhly	50	5
Sandberg bluegrass	50	5
Plains reedgrass Thickspike wheatgrass Sideoats grama	50	5
Little bluestem Needleandthread Prairie junegrass Inland saltgrass Other grasses	50	5
Grasslikes		
Needleleaf sedge Other sedges	T 1/	--
Forbs		
Prairie thermopsis Poverty weed Wooly indianwheat Rush skeletonplant Eriogonum species Other forbs	100	10
Shrubs and half-shrubs		
Fringed sagebrush Broom snakeweed Big sagebrush Greenplume rabbitbrush Nuttall saltbush Other shrubs	100	10
Total	1000	100

1/ T refers to trace amounts, 2½ percent or less.

3--Shallow Clay Range Site

4. DOMESTIC LIVESTOCK GRAZING VALUE

a. This site has a low stocking rate potential due to the limited production potential and erodibility. It is suited for both cattle and sheep grazing. The best seasons of grazing are summer and fall. Good range management is necessary to conserve the vegetation and ground cover.

5. WILDLIFE NATIVE TO THE SITE

a. This site is utilized for forage by the mule deer, some white-tailed deer, and antelope. Small mammals that inhabit the site are the coyote and jackrabbit. Upland birds that seek forage and cover are the sage grouse, mourning dove, meadowlark, and mountain plover. Other songbirds common to this site are the northern shrike, brown thrasher, red-winged blackbird, and several birds of prey.

6. ESTHETIC AND RELATED VALUES

a. The shallow clay range site is found within the North Dakota Badlands. Thus, because it is in complex with several other sites and land types, the area has much to offer the observer in varied topography, color, and scenery. Chief recreational activities are hunting, hiking, horseback riding, rock hounding, and bird watching.

7. HYDROLOGIC CHARACTERISTICS

a. Runoff from this site in good to excellent condition, properly grazed range is medium to rapid depending upon slopes. Rate of water transmission of the soil is very slow.

8. A TYPICAL SITE LOCATION FOR THIS AREA IS AS FOLLOWS